

ISSUANCE DATE: December 13, 2012
BID OPENING DATE: January 4, 2013
BMA APPROVAL DATE: January 28, 2013

**CITY OF GERMANTOWN
INVITATION TO BID
REHABILITATION OF PIPELINE
CURED-IN-PLACE PIPE**



**CITY OF GERMANTOWN
1930 SOUTH GERMANTOWN ROAD
GERMANTOWN, TENNESSEE 38138**



CITY OF GERMANTOWN TENNESSEE

1930 South Germantown Road • Germantown, Tennessee 38138-2815
Phone (901) 757-7200 Fax (901) 757-7292 www.germantown-tn.gov

REQUEST FOR BIDS

Date: December 13, 2012

The City of Germantown, Tennessee, will accept Bids on:

REHABILITATION OF PIPELINES CURED-IN-PLACE PIPE

Bid shall be mailed in a **sealed envelope** marked **"CURED-IN-PLACE PIPE"** in the lower left-hand corner of the envelope and addressed to Purchasing Officer, City of Germantown, P. O. Box 38809, Germantown, TN 38183-0809 or, **if using express mail** (Fed Ex, Priority Mail, etc), address to 1930 S. Germantown Rd., Germantown, TN 38138. Please place in a sealed envelope inside the express mail packaging. (*Bid must be received by the City prior to the time indicated below.*) **Please mark envelope with the name of the Bid and company name.**

Bid shall be opened at 1930 S. Germantown Rd at 2:00 p.m. CST on January 4, 2013.

All purchases are F.O.B. Germantown, Tennessee.

The City reserves the right to accept or reject any Bid, to accept a Bid containing variations from these specifications if the Bid so merits, and to accept partial Bids. **Bids must be submitted on the Bid document that the City issues and it must be signed.**

The Successful Bidder shall be prohibited from discriminating against any individual due to his race, creed, color, national origin, age or sex.

The City may waive any informalities or minor irregularities. The Board of Mayor and Aldermen is the final authority and shall have the right to reject any single Bid or all Bids submitted.

See attached Specifications, Bid Sheet, and Drug and Alcohol Testing Acknowledgment Statement and Affidavit that all must be returned as part of the Bid. Returning the form for disclosure of the Title VI and Title IX information is voluntary.

The Standard Germantown Construction Contract, Payment Bond, Performance Bond and the required Insurance Certifications are included and will be required from the selected Bidder.

Sincerely,

Lisa A Piefer

Lisa A. Piefer
Purchasing Officer

SPECIAL NOTICE

DOCUMENTS:

All contractors bidding on construction projects for the City of Germantown are required to use the Documents contained herein.

Insurance:

It is recommended that contractors consult with their insurance agent(s) to assure themselves that they can obtain the required insurance coverage set out in the Insurance Documents and that their insurance agent(s) is authorized to execute the required Certificate of Insurance Coverage.

Documents to be Executed:

A BIDDER should only execute the BID FORM, and the DRUG AND ALCOHOL ACKNOWLEDGMENT STATEMENT when submitting a BID. Submission of the Title VI and Title IX Form is voluntary. The remaining forms contained in the CONTRACT DOCUMENTS (including the CONTRACT, PERFORMANCE & PAYMENT BONDS, and the INSURANCE CERTIFICATIONS) will be required to be executed and complied with only by the successful BIDDER after notice of the award has been issued.

Additional Information

General and/or technical questions relating to this solicitation shall be submitted in writing to the City of Germantown, City Purchasing Agent, via e-mail at Purchasing@germantown-tn.gov

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CITY OF GERMANTOWN

REHABILITATION OF PIPELINES – CURED-IN-PLACE PIPE

The City of Germantown is seeking licensed contractors qualified to perform necessary rehabilitation of storm and sanitary sewer pipelines using proven cured-in-place pipe lining methods. Services will be performed on the City's pipelines including 8-12 inch sanitary sewer collection pipelines.

I. General Information

The project services will include all necessary labor, equipment, materials, supplies and expertise required to perform a complete turnkey rehabilitation of the project pipelines including typical worksite traffic control, coordination/communication with the affected residents and businesses, and a general performance warranty of at least one (1) year.

The City of Germantown will provide the following services for this project:

- Supply of fresh water
- Dumpsite for the sewer debris removed

All rehabilitation services must be performed during a 30-day period and no later than 30 days after receipt of Notice to Proceed. It is anticipated that the contract will be executed and the purchase order issued no later than February 25, 2013

For purposes of this bid, contractors must submit the **unit prices** for the indicated cured-in-place pipe installation and reconnection services to be performed. All other services performed as part of this pipeline rehabilitation project are considered incidental to the quoted services and will not be separately charged. Any exceptions or typical installation services not included in the unit prices should be clearly indicated in this bid.

The selected bidder will be required to enter into a standard City of Germantown contract, to provide payment and performance bonds, and to maintain sufficient insurance according to the City's insurance requirements (contract, bond forms and insurance information attached). In addition, the selected bidder must be currently licensed as a **Tennessee contractor** with a classification of at least **MU-A(2)**.

A listing of the pipeline locations, pipeline distance and service taps is enclosed. Further questions regarding the pipe to be rehabilitated can be e-mailed to Lisa Piefer, Purchasing Officer via e-mail at Purchasing@germantown-tn.gov

Bidders must submit the **unit prices** that will be charged for the following cured-in-place pipe per linear foot (lf) and reconnection services which include all labor, equipment, materials, supplies and expertise required to provide a turnkey rehabilitation project as indicated by these bid specifications:

II. Location of Pipelines for Rehabilitation—FY2013

Below are the **approximate** locations and other additional information for the Sanitary Sewer Pipelines for rehabilitation under the Bid. Attached are Drawings and General Locations of the Pipelines indicated below.

Bidders are responsible for verifying the information for purposes of making a Bid.

1. Areas to be lined:

- (a) Terminus of Deep Valley Cv to 7291 Deep valley Dr.
- (b) 7291 Deep Valley Dr to 7368 Deep Valley Dr.
- (c) 7270 Magnolia Ridge Dr to 7321 Magnolia Ridge Dr.
- (d) Terminus of Magnolia Ridge Cv to 7321 Magnolia Ridge Dr.
- (e) 7321 Magnolia Ridge Dr to corner lot of 7345 Overhill Cv.
- (f) Corner lot of 7345 Overhill Cv to Magnolia Ridge Dr & Laurel Ridge Cv.
- (g) Magnolia Ridge Dr from Laurel Ridge Cv to terminus of Laurel Ridge Cv.
- (h) Magnolia Ridge Dr from Laurel Ridge Cv to 7378 Deep Valley Dr.
- (i) 7378 Deep Valley Dr to 7388 Deep Valley Dr.
- (j) 7388 Deep Valley Dr to back yard corner lot of 7398 Deep Valley Dr.
- (k) Back yard corner lot of 7398 Deep Valley Dr across Poplar Ave to 1951 Miller Farms Rd.
- (l) 1883 Miller Farms Rd to 1939 Miller Farms Rd.
- (m) 2309 Sleepy Hollow Ln to back yard corner lot of 2308 Sleepy Hollow Ln.
- (n) Back yard corner lot of 2308 Sleepy Hollow Ln to south corner of Germantown Square W.
- (o) South corner of Germantown Square W to 2262 McVay Rd.
- (p) 9000 Forrest Hill - Irene Cv to 8983 On The Hill Cv.
- (q) 9078 Forrest Hill - Irene Cv to terminus of Forrest Hill - Irene Cv.
- (r) C.O. Franklin Park Restroom Pavilion on Melanie Smith Ln to 2576 Moore Rd lift station.

2. Footage : 7,515.5

3. Sewer Main Sizes:

- (a) 8 inch (6,353.5ft.)
- (b) 10 inch (1,162ft.)

4. Number of Service Taps: 54

Comments: These are the only areas scheduled to be lined. There will be limited access to some of these areas and will require creative planning in order to reach some locations. **It is suggested that all interested Bidders take a tour of the areas before they submit their Bid.** There will be someone with the Sewer Division available to assist with the tours. Please contact Bruce Tillman at 901-757-7353 to schedule a tour.

III. SUMMARY OF WORK

- 1. The exact length and location of the sewers to be rehabilitated will depend on the final costs and other variables. The City of Germantown reserves the right to add to or delete from the list of sewer sections presented in Item No.2 Locations of Pipelines.
- 2. The general scope of services to be provided by the Contractor shall include the following:
 - A. Practice the highest industry standard for safety and professionalism at all times.
 - B. Pre-clean and video record the pertinent sewer sections.

- C. Perform bypass pumping as appropriate or required.
- D. Remove all obstructions and debris from within the sewer section. No heavy cleaning or point repairs shall be initiated without express prior consent of the Owner/Engineer.
- E. As appropriate or required, the subject sewer section may need to again be cleaned, inspected, and video recorded with special attention given to the service connections, immediately prior to CIPP installation / inversion.
- F. The Contractor shall provide the Owner with a video recording of the sewer sections prior to CIPP installation and to review these recordings with the Owner/Engineer as required.
- G. The CIPP may be installed by either air inversion and steam cured or water inversion and hot water cured. The Contractor shall specify the proposed method in the bid response.
- H. The Contractor shall provide the Owner/Engineer with the CIPP manufacturer's recommended time and temperature table for the CIPP cure prior to CIPP installation. Following the CIPP installation and cure, the Contractor shall provide the Owner/Engineer with a signed copy of the actual time and temperature table recorded during the CIPP cure.
- I. Two samples of the cured CIPP shall be retained by the Contractor and delivered to the Owner/Engineer for laboratory testing. Submission of the test samples to the laboratory and payment for said testing shall be the responsibility of the Owner.
- J. All service connections are to be completely reinstated prior to end of work each day. This includes any service connections that may require a point repair.
- K. The standard work day shall be Monday through Friday, 7:00 am until 6:00 pm.
- L. The Contractor shall provide the Owner with a final video recording of the finished CIPP and to review these recordings with the Town as required.
- M. The Contractor will be responsible for any street repairs, yard restoration, and any damages to curb and gutters or sidewalks or and other damages caused by Contractor's operations.
- N. Contractor is to insure that work is clear of encroachment into property outside of easements and right of way.
- O. The Contractor shall perform work in stages to provide public convenience. Do not close off public use of facilities until completion of one stage of construction will provide alternate usage.
- P. Coordinate use of premises under direction of the Owner/Engineer.
- Q. All work is required to meet City of Germantown construction standards, codes and specifications.

IV. SPECIFICATIONS

PART 1: GENERAL

1.01 Scope

Furnish all labor, material and equipment to provide for the reconstruction of existing sewer pipes using an approved Cured-In-Place Pipe (CIPP) method by forming a new pipe within an existing pipe, which has generally maintained its original shape. This specification covers the general requirements for the referenced specifications, CIPP manufacturer and installer qualifications, submittal and guaranty guidelines, materials, installation and testing procedures.

1.02 General

Supply all products and perform all work in accordance with applicable American Society for Testing and Material (ASTM), American Water Works Association (AWWA), American National Standards Institute (ANSI), or other recognized standards. Latest revisions of all standards are applicable. Where discrepancies exist between this specification and referenced product/process standards, this specification shall govern.

1.03 Intent

It is the intent of this specification to provide for the reconstruction of existing sewers by the CIPP method in pipes which have generally maintained their original shape. The CIPP shall provide flow capacity not less than 100% of the original pipe's flow capacity when new. The process is defined as the reconstruction of sewer lines by the installation of a thermosetting resin-impregnated flexible felt-fiber tube coated on one side with an impermeable plastic which is installed into the existing sewer utilizing a hydrostatic head or air pressure. Curing is accomplished by circulating hot water or the introduction of controlled steam throughout the length of the inverted tube to cure the resin into a hard, impermeable pipe with the plastic coating on the interior surface of the newly formed pipe. The CIPP shall extend the full length of the original pipe segment and shall provide a structurally sound, joint-less, close fitting and corrosion resistant cured-in-place pipe.

1.04 Minimum Qualifications for CIPP Products & Installing Contractors

In order to establish minimum product quality and Installer capability, the following minimum requirements shall be met. The purpose for these submittals is to allow the Owner the opportunity to conduct a complete, thorough and objective evaluation of proposed CIPP products and the Installing Contractor and to determine if the submitted products and Installer meet all experience, quality and utility standards required by the specification.

CIPP System Manufacturer

1. The cured-in-place (CIPP) **system** must have a minimum proven performance record of 1,000,000 linear feet installed of the exact name-brand product bid in the United States, with a minimum of 20,000 linear feet in diameters 24-inch or larger. In addition, a minimum of 10,000 linear feet of 48-inch diameter or larger, of the exact name brand product must have been installed in the United States. **Documentation shall be submitted with the Contractor's bid. Failure to provide this documentation may be grounds for disqualification.**

Contractor/Installer Experience

1. The **Installing Contractor** for the cured-in-place reconstruction of sewers must have a minimum of 5 years experience using the exact named product proposed and, have installed at least 500,000 linear feet of the exact named proposed product including at least 20,000 feet of 24-inch diameter

(or larger) cured-in-place product. The installing Contractor must certify that the liner tube/resin composite system to be used is the exact system for which all submittals and certifications were made in the bid. No substitutions will be allowed, and misrepresentations or omissions may be grounds for contract termination with the Contractor waiving any and all claims against the Owner for work performed or costs incurred. **Documentation shall be submitted in the Contractor's bid. Failure to provide this documentation may be grounds for disqualification.**

2. The **Qualifying Superintendent** must have a minimum of five years experience with cured-in-place pipe products. In addition, the Qualifying Superintendent must have supervised jobs in which at least 20,000 feet of pipe has been reconstructed using the exact named product proposed including a minimum of 5,000 feet of 24-inch diameter (or larger) cured-in-place product. The superintendent for the job shall be on-site during all phases of the work involving any pre and post-installation video inspection, sewer cleaning or insertion and processing of the CIPP.

1.05 Submittals

Cured-In-Place-Pipe

1. The Contractor shall furnish two copies of the **design calculations** establishing the structural capabilities, chemical composition, thickness, curing temperature and period, assumptions, and other mechanical properties of the liner system proposed. **Documentation shall be submitted in the Contractor's bid. Failure to provide this documentation may be grounds for disqualification.**
2. The Contractor shall furnish two copies of the **manufacturer's brochures** giving a complete description of the product proposed, its physical and chemical composition, the same for the thermosetting resin or epoxy hardener, the recommended range of curing temperature, period of cure, cool-down procedures and method of installation. **Documentation shall be submitted in the Contractor's bid. Failure to provide this documentation may be grounds for disqualification.**

PART 2 PRODUCTS

2.01 Cured-In-Place-Pipe

1. The CIPP material shall be fabricated from materials which, when cured, will be suitable for the environment intended, i.e., resistant to withstand exposure to sewage gases containing normal levels for domestic sewage of hydrogen sulfide, carbon monoxide, carbon dioxide, methane, traces of mercaptan, kerosene, saturation with moisture, dilute sulfuric acid, external exposure to soil bacteria, and any chemical attack which may be due to materials in the surrounding ground. The final product must not deteriorate, corrode, or lose structural strength in any manner that will preclude meeting the expected design life.
2. The structural performance of the inverted cured-in-place pipe must be adequate to accommodate all internal and external loads (live and dead) over its service life. The CIPP liner shall be designed considering the host pipe is fully deteriorated, a prism loading, a soil loading of 120 pcf, a 2.0 factor of safety, a 2-percent ovality, a 5-percent maximum deflection, a 1,000 psi modulus of soil reaction, a 4,500 psi flexural strength, a 3,000 psi tensile strength, a lining enhancement factor (K) of 7 maximum, H-20 live loads where applicable, 50-percent long-term modulus reduction factor and a hydrostatic load beginning at the surface.

2.02 Polyester Resins

1. The resin used shall be high-grade corrosion resistant isophthalic polyester specifically designed for the CIPP being installed. Only premium, non-recycled resin shall be used.
2. The resin vendor must be able to reference the corrosion scale with the resin itself having a heat deflection temperature greater than 212 degrees Fahrenheit.

2.03 Urethane-modified Vinyl Ester Resins (if applicable)

1. The resin used shall be a high-grade, premium vinyl ester combining outstanding corrosion resistance and high-temperature performance with excellent laminating characteristics. Only premium, non-recycled resins shall be used.
2. The resin vendor must be able to reference the heat corrosion scale with the resin itself having a heat deflection temperature greater than 244 degrees Fahrenheit.

2.04 Quality Assurance

1. In order that the Owner is assured that the specified resin class is used for the duration of the Contract, the following provisions are made part of this specification:
 - a. The Contractor shall designate a wet-out facility and shall provide wet-out liner tubes from this designated facility only. Multiple facilities to supply wet-out liner tubes for the duration of this contract may not be used without prior approval of the Owner.
 - b. The Owner shall have the right to visit and inspect the designated wet-out facility and obtain samples of the resin for testing purposes without prior notice to the Contractor for the duration of the Contract.
 - c. The Owner may perform random Infrared Scans (IR Scans), Composite Burn-offs, and/or other quality assurance testing to insure resin quality and consistency throughout the duration of the Contract. The Owner shall be solely responsible for the cost of said testing.

2.05 Liner Tube

1. The tube shall consist of one or more layers of absorbent non-woven felt fabric and meet the requirements of ASTM F1216. In the event of a discrepancy between the referenced ASTM requirement and this specification, this specification will govern.
2. The acceptable liner tube shall be constructed under ISO 9002 certified procedures. Proper certification shall be provided prior to the manufacture or installation of any CIPP.
3. The tube shall be constructed to withstand installation pressures, have sufficient strength to bridge missing pipe, and stretch to fit irregular shaped pipe sections.
4. The wet-out tube shall have a uniform thickness that when compressed at installation pressures shall meet or exceed design “finished and installed” thickness.
5. The tube shall be manufactured to a size that when installed shall tightly fit the internal circumference and length of the original pipe. In the event that under-sized pipe is present, liner tube shall be manufactured so that overlap folds or wrinkles do not occur.

6. The outside layer of the tube, before installation, shall have an impermeable polyurethane or polyethylene plastic coating. This coating shall be an impermeable, flexible membrane that shall contain the resin and facilitate monitoring of resin saturation during resin impregnation. This coating shall form the inner layer of the finished pipe and is required for enhancement of corrosion resistance, flow, and abrasion properties.
7. The tube shall be homogeneous across the entire wall thickness containing no intermediate or encapsulated layers. No material may be included in the tube that may cause de-lamination in the cured liner, and no dry or unsaturated areas or layer shall be evident.
8. The wall color of the interior liner surface after installation shall be a light-reflective color so that a clear, detailed inspection with closed-circuit television equipment may be conducted.
9. The outside of the tube shall be marked for distance at regular intervals not to exceed 10 feet. Such markings shall include the Manufacturers name or identifying symbol.

2.06 CIPP Design

1. Liner Thickness

The Contractor shall submit liner thickness calculations to the Owner for review. The CIPP shall be designed in accordance with the applicable provisions of F1216 and D2412 for “fully deteriorated gravity pipe conditions” and shall meet the following design conditions:

- a. AASHTO H-20 Live Load with two trucks passing for CIPP in streets (16,000 lbs.)
 - b. A soil modulus of elasticity of 1000 psi, soil weight of 120 pounds per cubic foot and a coefficient of friction of $K_u' = 0.130r$.
 - c. Short-term flexural modulus of 250,000 psi and long-term modulus of 125,000 psi. Flexural strength of 4,500 psi.
 - d. Safety factor of 2.0 shall be used.
 - e. Groundwater elevation at the ground surface.
 - f. Pipe ovality of 5%.
 - g. Poisson ratio of 0.3.
 - h. Enhancement factor (K) of 7.
 - i. Service temperature range shall be 40 to 140 degrees F.
 - j. Maximum long-term deflection shall be 5%.
2. The CIPP shall also conform to the minimum requirements demonstrated in the following table:

Physical Property	ASTM Standard F 1216, Latest Revision	Minimum Value
Flexural Stress	ASTM D-790	4,500 psi
Flexural Modulus of Elasticity	ASTM D-790	250,000 psi

3. Minimum Acceptable Pipe Thickness (**"Finished and Installed"**)

- a. The minimum "finished and installed" cured liner thickness shall be as follows, regardless of what the calculations indicate as the required minimum thickness:

Pipe Diameter (Inches)	Depth to Invert (Feet)	"Finished & Installed" Thickness (mm)
8.0	0.0 – 13.0	5.6
10.0	0.0 - 15.0	6.0

- b. The above table is in regards to minimum liner thicknesses only. It is the Contractor's responsibility to determine the site specific external loads on the liner and increase its thickness as required. The Contractor shall submit his proposed plan for ensuring that the finished and installed CIPP meets the above minimum thickness requirements. The plan shall include detailed inversion procedures to reduce stretching and resin loss.
- c. The contractor shall submit his price proposal based on the appropriate length, size, and existing pipe parameters designated in the Bid Item or Bid Proposal Section. The deterioration of sewers is an on-going process. Should pre-construction inspections reveal the sewers to be in substantially different conditions than those in the design considerations, the contractor shall request such changes in reconstruction liner thickness, supporting such requests with design data. The deviation, if approved, shall be reflected by the appropriate addition or reduction in the unit cost for that size as agreed to by the Owner.
- d. Any liner that does not meet the specified strength and/or thickness requirements, regardless of the amount below the specified requirements, shall be corrected by the Contractor in a manner approved by the Owner at no additional cost to the Owner. The Owner's decision on how to correct deficient CIPP installations shall be final. Options for correcting deficient liners that will be considered by the Owner include removing the liner and re-lining the sewer, excavating and replacing the sewer from manhole to manhole, or providing the Owner with a substantial credit. The primary option that will be considered will be to re-line the sewer. Credits will only be authorized for CIPP that does not meet required thickness. If a credit is acceptable to the Owner, the credit shall be calculated by multiplying the bid price by the percent that the liner thickness is below the required installed thickness as follows:

$$\text{Credit} = (1 - \text{Installed CIPP thickness/required CIPP thickness}) \times \text{bid price}$$

The Contractor shall not assume a credit will be acceptable to the Owner in any case.

PART 3 EXECUTION

3.01 By-Pass Pumping

1. The installation methodology contemplated requires the temporary blocking and back-ups of sewers and sewage. Contractor shall be responsible to limit the extent and duration of such blockages and back-ups so that overflows and spillage onto public or private property and into storm sewers, waterways, and streets does not occur. In the event that such spillage or overflows do occur during the course of or as a result of the Work, the Contractor performing the Work shall immediately eliminate the spillage or overflow and, as necessary, remove the blockage and

eliminate the back-up. On elimination of the spillage or overflow, the Contractor is to clean up and disinfect the area. Work to stop or contain such events is to be deemed EMERGENCY in nature and sufficient justification for total mobilization of resources, the use of overtime or double time, and any other reasonable measures to assure correction of the problem without delay. Damages arising from blockages, back-ups, spillage, or overflows of sewage during the course of the Work or because of the Work shall be the sole responsibility of the Contractor.

2. Sewage flow shall be pumped around segments during the installation and testing of cured-in-place pipe, the televising of sewers and lateral service reinstatement.
3. Pumping equipment shall have the capacity to convey 100% of peak flows around the construction area. The flow shall be intercepted at the upstream end of the construction area and shall be pumped through temporary piping of adequate size. The flow shall be discharged into a manhole on the downstream side of the construction area, thus by-passing the sewer segment(s) under construction. The Contractor shall be required to contact all residential and commercial customers whose service lines connect to the sewer main being bypassed and inform them that they will be temporarily out of service. The Contractor shall also advise those customers against water usage until the mainline is back in service. After completing the necessary work on the main line to allow its reuse, the Contractor shall advise those customers that the sewer main is back in service. The Contractor shall maintain a high degree of professionalism in workmanship, conduct, and appearance, at all times while on site. Should a condition arise that the Contractor cannot restore service within 12 hours of service interruption; the Contractor shall make provisions for pumping all flows within the service interruption area at no cost to the Owner.
4. Open channels or trenches shall not be used to convey flow.
5. A standby pump of the same capacity shall be required on site.
6. The Contractor is responsible for paying all fines and restitutions imposed for overflows or spills during construction.

3.02 Cured-In-Place-Pipe Rehabilitation

1. All reconstruction of existing gravity sewer mains using an approved CIPP Product and Installer shall be performed in strict accordance with this Specification and the latest revision of ASTM F1216. Where discrepancies exist, or any latitude is either inferred or interpreted between this specification and ASTM product and process standards, this Specification shall govern.
2. Pull-In and Inflate methods of CIPP installations, (reference ASTM F1743), will not be acceptable.
3. The Contractor shall carry out his operations in strict accordance with all applicable OSHA standards. Particular attention is drawn to those safety requirements involving work on an elevated platform and entry into a confined space.
4. The Owner will provide water meter(s) and access to water hydrants for cleaning, inversion, and other work items requiring water.
5. All surfaces, which have been damaged by the Contractor's operations, shall be restored to a condition at least equal to that in which they were found immediately prior to the beginning of the Contractor's operations. Suitable materials and methods, acceptable to the Owner, shall be used for such restoration. The restoration of existing property or structures shall be done as promptly as

practicable and shall not be left until the end of the construction period. The cost for correcting damages resulting from the Contractor's actions shall be the responsibility of the Contractor.

6. The tube shall be fabricated to a size that, when installed, will neatly fit the internal circumference of the conduit(s) designated for CIPP. After curing of the resin is completed, the hardened CIPP will extend from manhole to manhole of the section designated providing a structurally sound, corrosion-resistant, watertight conduit that excludes exfiltration and infiltration, is tight-fitting within the existing pipe, and is free of voids or annular spaces between the CIPP and the existing pipe walls. K-Factor for tightness shall equal 7.0 or greater. All terminations into manhole walls shall be watertight at the time of final inspection. No annular space shall be visible between the CIPP and manhole wall. In the event that an annular space is present, it shall be completely filled with epoxy or other suitable material to the satisfaction of the Owner.
7. The Contractor shall be responsible for determining the minimum length to effectively span the distance from the manhole to manhole and shall verify the length of the fabric tube in the field before the tube is either cut to length or wet-out with resin. The tube may run through one or more manholes with the approval of the Owner.
8. All active laterals, taps, or side connections will be reinstated from inside the rehabilitated pipe where possible. In smaller diameter pipe in which man-entry is not possible, side connections must be reinstated internally by suitable, TV-monitored, robotic cutting equipment. Cross-sections of the opening of the side connections must be reinstated by at least 95-percent of the original opening. Reinstated lateral service openings shall be brushed smooth to the satisfaction of the Owner. Main-to-lateral connections shall be as watertight as possible to the satisfaction of the Owner and verified as such via post CCTV inspection. The cost for correcting deficiencies discovered shall be the responsibility of the Contractor.

3.03 Preliminary Installation Requirements

1. Normal Cleaning of Sewers

- a. Sewers shall be cleaned of all debris, roots and other materials that would inhibit proper inversion of CIPP.
- b. Utilizing high-pressure jet cleaning equipment, several passes are completed to assure that all debris is removed from the pipe to the satisfaction of the Owner. The use of a standard duty root saw with circular blade may be required to remove fine "hair" roots.

2. Heavy Cleaning of Sewers

Heavy Cleaning shall be defined as the pipe being more than 25% full of debris or requiring the use of apparatus other than normal high-pressure jetting equipment. Any heavy cleaning must have pre-approval from the Owner. Any heavy cleaning performed will be at the Contractor's expense and not considered a pay item.

3. Debris Disposal

All debris cleaned from the pipe shall be removed and disposed of at a dumpsite designated by the Owner at no additional cost to the Contractor. Care shall be taken by the Contractor to not allow gloves or other Contractor generated waste or debris from entering the waste stream for disposal. Debris shall not be allowed to wash into any other pipe segment either upstream or downstream from the pipe segment being cleaned.

4. Point Repairs

The Contractor shall be responsible for locating all existing underground utilities prior to performing any excavation.

5. Provision and Usage of Water

The Owner shall provide all water required to perform this Work. The Owner shall provide a fire hydrant meter at no cost to the Contractor beyond the normal security deposit for use on the Project. Contractor shall coordinate connection and usage limits and withdrawal locations with the Owner prior to construction.

6. Pre-Installation Video Inspection

- a. Prior to installation of the CIPP, but not more than 48-hours prior to such installation, the section of sewer designated for CIPP is to be televised its full length using a remote television camera specifically designed for that purpose.
- b. Inspection of the sewer pipe shall be performed by the Contractor's experienced personnel trained in the location of breaks and obstacles by CCTV inspection. Utilizing a color video inspection system with data recording capabilities, the entire pipe section to be lined shall be recorded in a Digital Format and two (2) copies produced. The interior of the pipe shall be carefully inspected to determine the location of any conditions, which may prevent the proper installation of the CIPP, and it shall be noted so that these conditions can be corrected. A DVD/CD-ROM and suitable log shall be submitted to the Owner.
- c. Pre and post-installation videos and logs shall be submitted during the course of the Work. The television camera used for this purpose shall be operative in one hundred percent moisture conditions. Lighting for the camera shall be sufficient to yield a clear picture of the entire periphery of the pipe. The camera, television monitor, and other components of the video system shall be capable of producing a five hundred line resolution picture. The camera's rate of travel shall not exceed 20 feet per minute. At each service, the camera shall come to a complete stop and the service shall be panned so that the entire cross-sectional area of the service is inspected. The footage meter count shall be clearly visible. Logs shall include date, line size, length, manhole numbers and project number, direction of camera travel, direction of flow, and any observed defects or comments. For each service the log should include the distance from manhole, its location (e.g. 9:00 or 2:00 o'clock), street address or parcel, and distance from mainline to cleanout. Videos between manhole segments shall be continuous; no breaks or "blink-outs" in the video shall be observed. The videos shall be in CD-ROM or DVD format.
- d. Sewer service connections shall also be TV inspected from within the sewer main, identifying all service connection locations and conditions. Conditions of service connections shall be noted in the log.
- e. The full cross-sectional area of the pipe shall be visible during video inspection except where misalignment of the sewer may have resulted in standing water in bellies or sags.
- f. If for any reason the camera or other tooling becomes disabled inside the sewer and cannot further proceed, the Contractor will be responsible for retrieving the camera or tooling at no additional cost to the Owner.

7. Identification and Pre-measurement of Lateral Connections

A 360-degree Pan-and-Tilt view camera shall be used to inspect the pipe. At each connection the operator will stop and turn the camera lens toward the lateral thereby inspecting the first 8 to 12 inches of the lateral connection. The Contractor shall be responsible for determining if connection is active or inactive. For each existing service connection determined by the Contractor to be active, the Contractor shall determine the condition of the service connection to the main, make his recommendation for lateral connection repair, and record both items in his log.

8. Traffic Control

The Contractor shall be responsible for traffic control during the course of each phase of the Work. Prior to beginning Work, Contractor shall submit a traffic control plan for each section of Work for the review and approval. It is the intent that this Work is to be accomplished with as little disturbance to traffic, private property, and the public as is reasonably possible, consistent with timely completion thereof. The traffic control plan shall reflect such requirements where applicable. Signs, signals, and detours shall conform to the Tennessee Department of Highways & Public Transportation requirements for streets and highways, latest edition. The Contractor shall have and maintain on site a sufficient supply of traffic cones and other traffic signaling devices, including trained and properly equipped flagmen, to safely control all traffic through the work zone(s). Road closures and / or detours will require advance scheduling and prior approval by the Owner.

3.04. Resin Impregnation of the CIPP Tube (Wet-Out)

1. The contractor shall designate a location where the tube shall be impregnated or “wet out” with resin, using distribution rollers and a vacuum impregnation system to thoroughly saturate the tube’s felt fiber prior to installation in the field. The impregnated tube shall be free of pinholes, resin voids and other defects. If the cured-in-place pipe is impregnated at the manufacturing plant, it shall be delivered to the job site in a refrigerated truck, and remain refrigerated prior to installation to prevent premature curing. The flexible tube shall be vacuum impregnated with resin under controlled conditions or by such other means provided such means can assure thorough resin impregnation to the full satisfaction of the Owner. The volume of resin used shall be sufficient to fill all voids in the tube material at normal or design thickness and diameter. The volume of resin shall be adjusted by adding seven to ten percent excess resin for the change in resin volume due to polymerization and allow for any migration of resin into the cracks and joints in the original pipe.

3.05 Inversion of CIPP

1. The impregnated tube shall be inverted through an existing manhole or other approved access point utilizing a hydrostatic water column or pressurized air until it has fully traversed the designated line length and the inversion face breaches the destination manhole or termination point. The fluid column or air pressure shall have been adjusted and maintained to be sufficient to cause the impregnated tube to hold tight against the existing pipe wall, produce dimples at side connections, and flared ends at the manholes. Lubricant during inversion shall be used as necessary in accordance with the CIPP manufacturer’s recommendations. Thermocouples shall be placed at the top and bottom interface of both ends of the liner for monitoring temperature during the cure cycle. Remote temperature sensing devices (thermo-guns) shall not be considered acceptable for temperature determinations. Care should be taken during tube installation not to over-stress the fabric fiber.
2. *When using pressurized air*, particular attention should be given to the maintenance of the minimum required “finished and installed” thickness of the CIPP. Before the inversion begins, the tube manufacturer shall provide the minimum air pressure required to hold the tube tight against

the host pipe and the maximum allowable pressure so as not to damage the tube. Once the inversion has started, pressure shall be maintained between the minimum and maximum pressures until the inversion has been accomplished.

3.06 Curing - Using Circulated Heated Water

1. A suitable heat source and water recirculation equipment is required to circulate heated water throughout the pipe. The equipment shall be capable of delivering hot water throughout the inverted tube to uniformly raise the temperature required to affect a cure of the resin.
 - a. **Initial cure** will occur during temperature heat-up and is completed when exposed portions of the new pipe appear to be hard and sound and the thermocouples indicate that the temperature is of a magnitude to realize an exotherm or cure in the resin. After initial cure is reached, the temperature should be raised to the post-cure temperature recommended by the resin manufacturer. Post-Cure temperature should be held for a period as recommended by the resin manufacturer, during which time the recirculation of the water and cycling of the heat source to maintain the temperature continues.
 - b. Prior to any inversion, the Contractor shall provide the Owner with a Manufacturer's Recommended Cure Hold Time and Temperature Table. This table shall indicate the minimum time and temperature the inverted tube will be held at in order to achieve desired physical properties. The resin manufacturer shall certify both the time and temperatures presented in the table.
 - c. Curing must take into account the existing pipe material, the resin system, and the ground conditions (temperature, moisture level, and thermal conductivity of the soil).

3.07 Curing - Using Controlled Steam

1. Suitable steam-generating equipment is required to distribute steam throughout the pipe. The equipment shall be capable of delivering steam throughout the inverted tube to uniformly raise the temperature required to affect a cure of the resin.
 - a. **Initial cure** will occur during temperature heat-up and is completed when exposed portions of the new pipe appear to be hard and sound and the thermocouples indicate that the temperature is of a magnitude to realize an exotherm or cure in the resin. After initial cure is reached, the temperature should be raised to the post-cure temperature recommended by the resin manufacturer. Post-Cure temperature should be held for a period as recommended by the resin manufacturer, during which time the distribution and control of steam to maintain the temperature continues.
 - b. Prior to any inversion, the Contractor shall provide the Owner with a Manufacturer's Recommended Cure Hold Time and Temperature Table. This table shall indicate the minimum time and temperature the inverted tube will be held at in order to achieve desired physical properties. The resin manufacturer shall certify both the time and temperatures on the table.
 - c. Curing must take into account the existing pipe material, the resin system, and the ground conditions (temperature, moisture level, and thermal conductivity of the soil).
 - d. As soon as possible following each cure the Contractor shall provide the Owner with a copy of the actual recorded time and temperature table achieved and documented during the cure.

3.08 Cool-Down

1. Cool-down of the cured pipe liner shall be in accordance with the manufacturer's recommendations. Care should be taken during the cool-down process so as to minimize shrinkage of the CIPP.

3.09 Lateral Service Reinstatement

1. After the CIPP has been cured, the existing service connections and laterals shall be reinstated. In general, reinstatement of service connections and laterals shall be accomplished internally, without surface excavation, using a remote control cutting device equipped with a television monitor. Reopened services shall be wire brushed to the satisfaction of the Owner. In some cases, remote reinstatement may not be possible. In these instances, reinstatement by conventional methods in accordance with the standard Specifications is acceptable. All connections must be reinstated by at least 95-percent of the original opening.

3.10 Daily Work Schedule

1. Insofar as is possible, work shall be so scheduled that the lining of the pipe, curing of the tube, and the reinstatement of service connections can be accomplished in a single working day or shift. Normal working hours shall be Monday through Friday 7:00 am until 6:00 pm. No weekend work or work beyond these stated hours shall be allowed without prior approval and consent from the Owner. At the end of each working day, temporary tie connections shall be made between the relined section of pipe and the existing system and the plug in the upstream manhole removed, but not before the section being lined has been properly cured in accordance with the manufacturer's instructions and all service connections are reinstated. In some instances, it may be necessary to bypass effluent from service connections.

3.11 Appearance of Finished CIPP

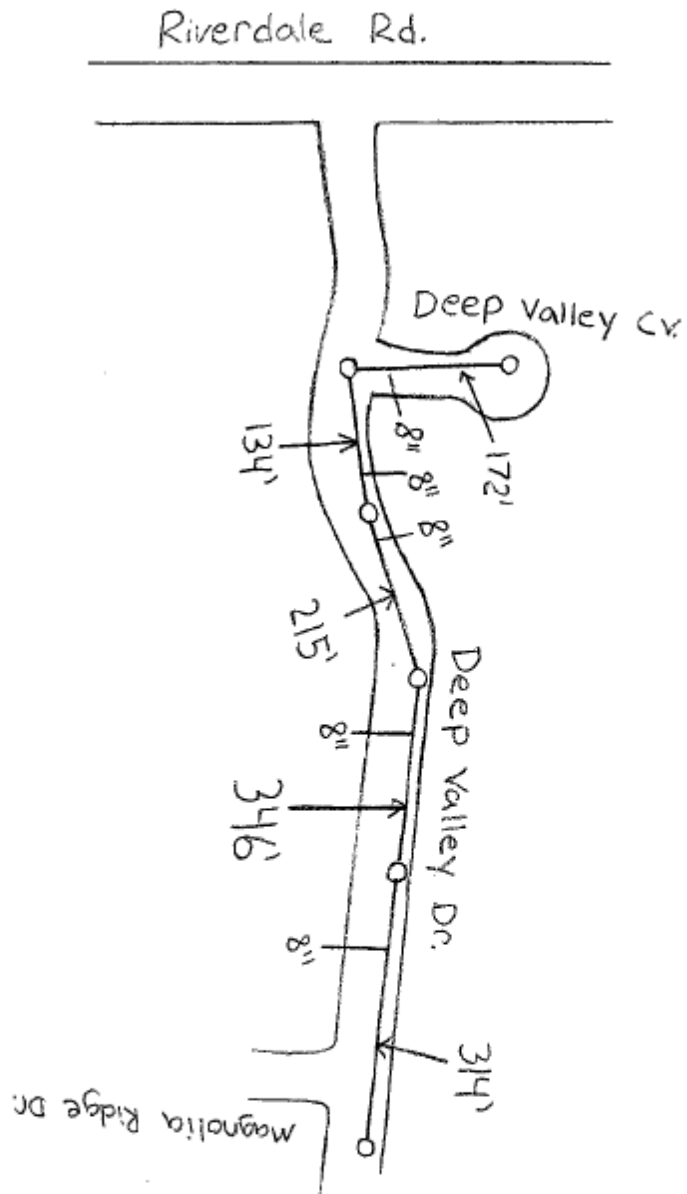
1. All workmanship and materials will meet the standards of the industry. The finished CIPP shall be continuous over the length of pipe between two manholes and shall be an impermeable, joint-less conduit, free from visual defects such as foreign inclusions, dry spots, pin holes, lifts, or delamination. Wrinkles in the CIPP, (other than minor, longitudinal pressure wrinkles) will not be acceptable. The Owner shall determine as to the acceptability of pressure wrinkling with that decision being final. In the event the finished liner does not fit tightly against the original pipe at its termination point(s), the space between the liner and the pipe shall be made watertight, utilizing manhole end seals, hydro-tite gaskets, or approved equal.

3.12 Acceptance Testing of CIPP

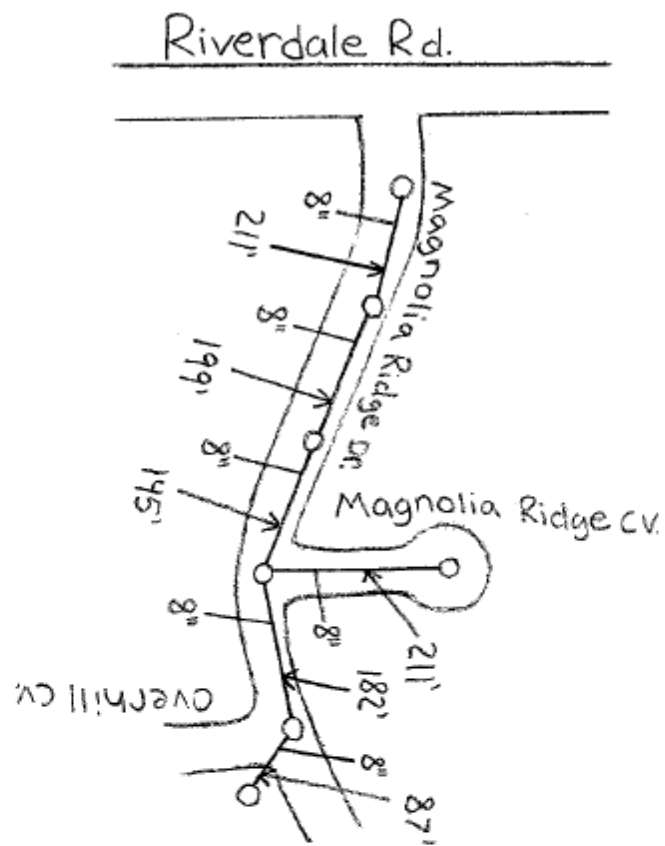
1. The Contractor shall collect restrained samples of each section of cured CIPP for laboratory determination of flexural strength, flexural modulus and wall thickness during the execution of this Contract. These three individual analyses shall comprise one completed test. All samples shall be collected per the sampling protocols set forth in ASTM F-1216.
2. The Contractor shall remove one restrained sample of each installed liner of suitable length for testing. For each restrained sample taken, the Contractor shall cut and promptly deliver two 1-inch wide representative samples (taken at least 2 inches from the end of the specimen) to the Owner. The samples delivered to the Owner shall be removed from any restraining mold, labeled and entered onto a chain-of-custody. It is recommended that the Contractor also retain identically labeled samples for their own purposes.

3. The tests shall be used to verify that the installed CIPP meets these specifications. CIPP thickness shall be measured in accordance with ASTM D5813. Flexural properties shall be determined per ASTM D790. The Contractor shall label and date all samples and deliver the samples directly to the Owner. All testing of the samples submitted to the Owner shall be performed by an independent, ASTM-certified testing laboratory of the Owner's designation and at the Owner's expense. Payment to the Contractor shall be withheld pending the Owner's acceptance of the CIPP test results.
4. Any liner that does not meet the specified strength and/or thickness requirements, regardless of the amount below the specified requirements, shall be corrected by the Contractor in a manner approved by the Owner at no additional cost to the Owner. The Owner's decision on how to correct deficient CIPP installations shall be final.

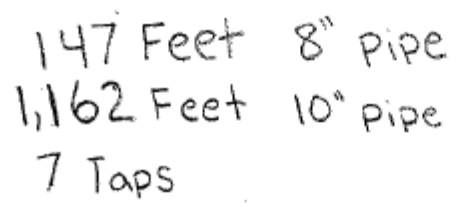
V. MAPS/DRAWINGS

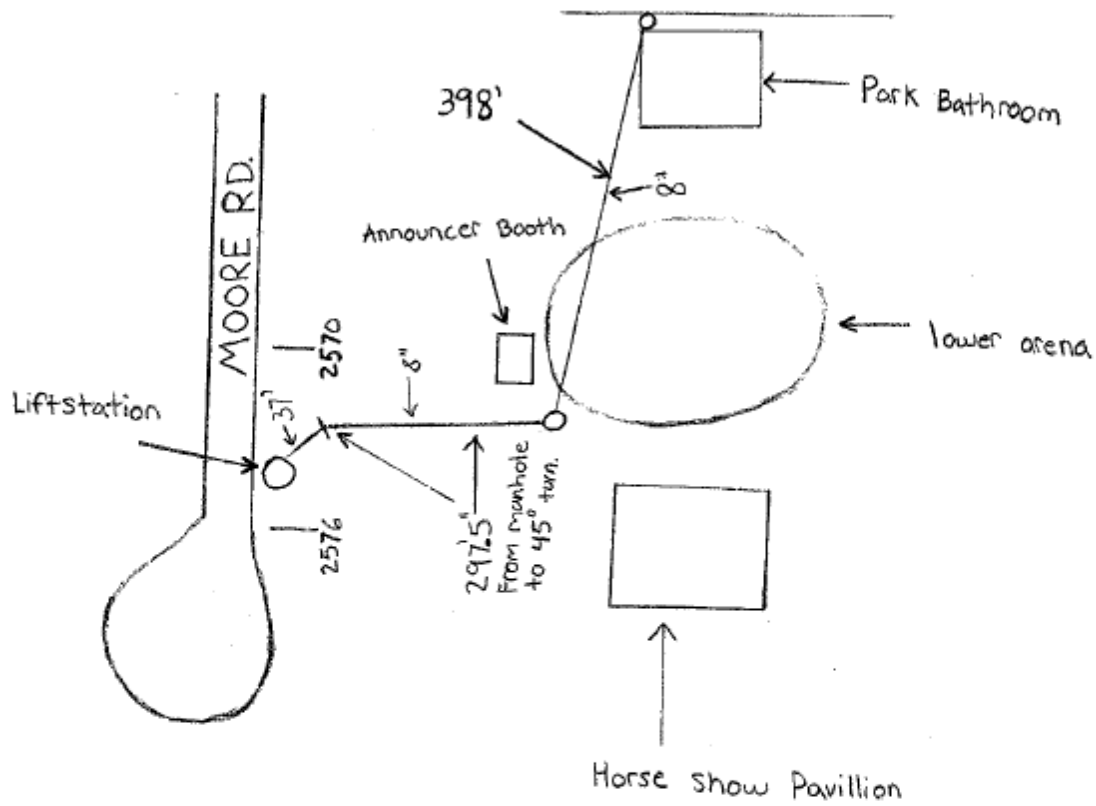


1,181 Feet 8" pipe
17 Taps

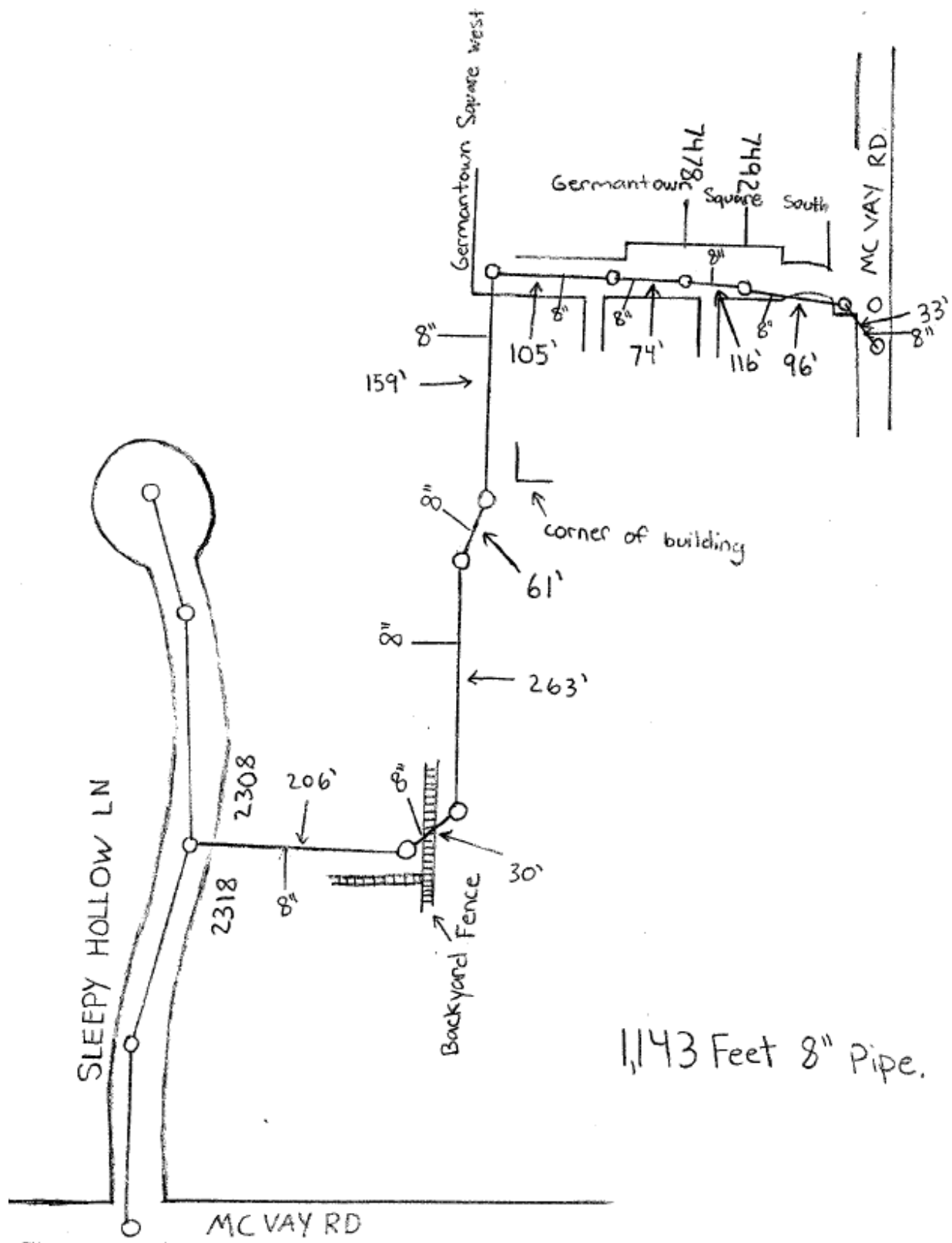


1,035 8" Pipe
12 Taps

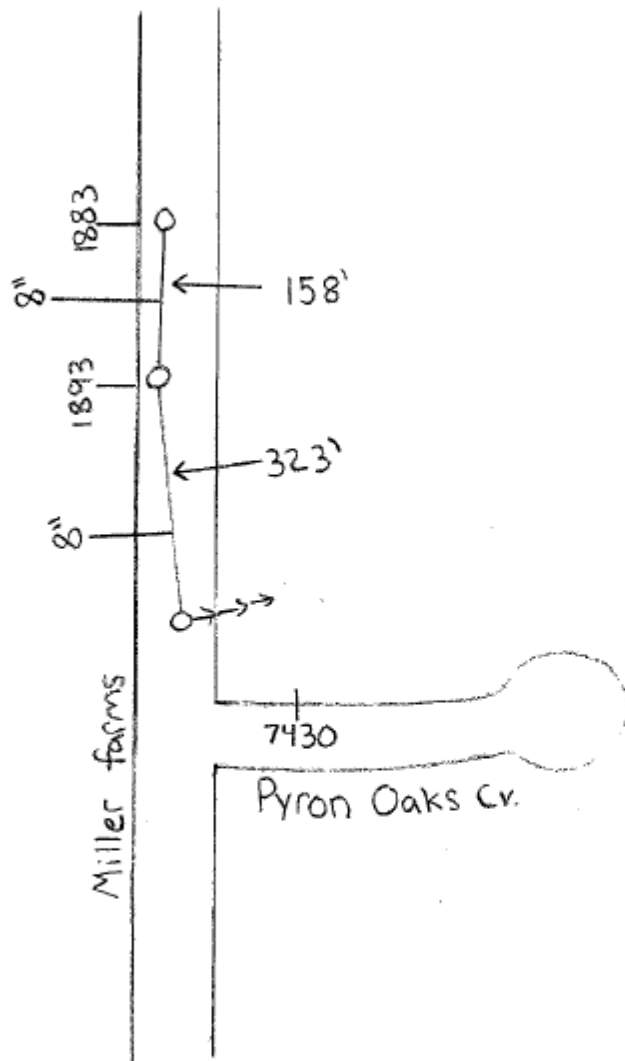




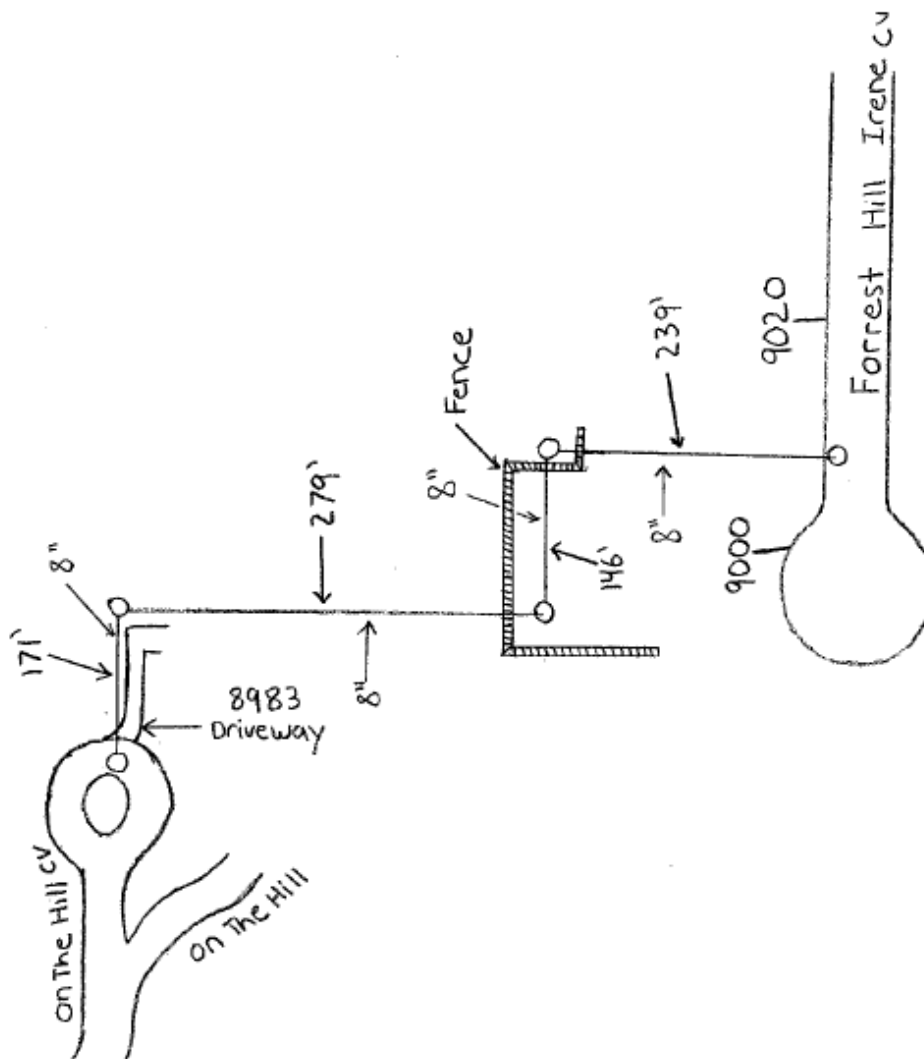
2 Taps
732.5 Feet 8" Pipe.



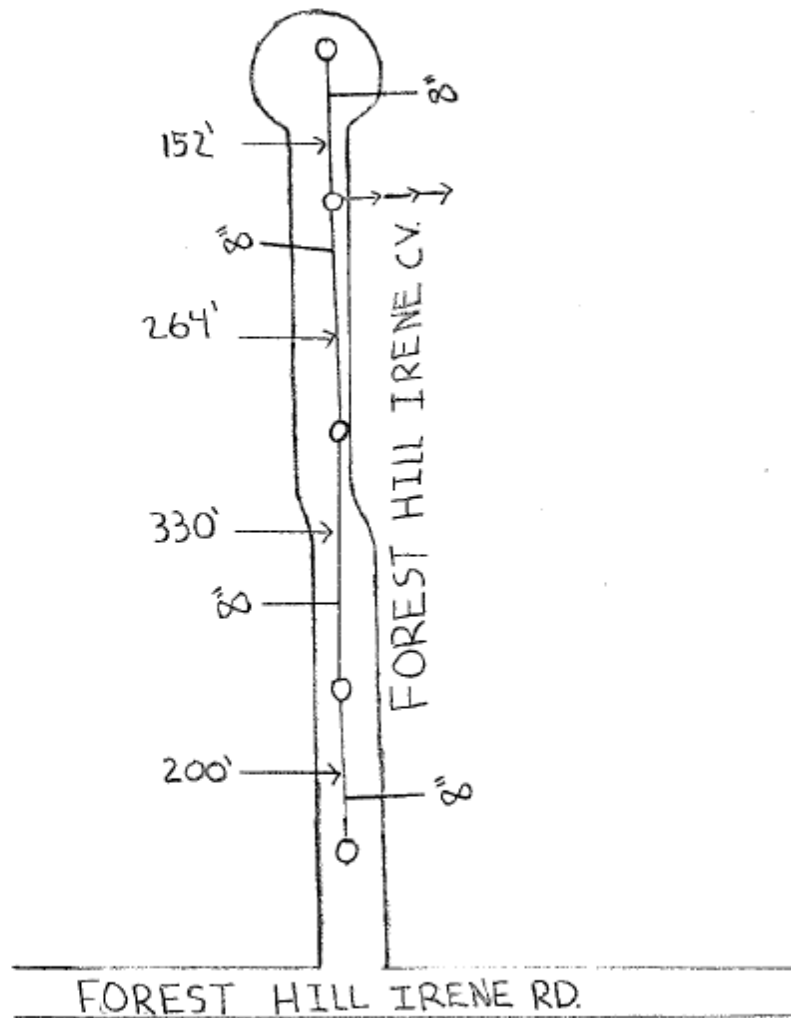
1,143 Feet 8" Pipe.



481 Feet 8" Pipe
4 Taps



835 Feet 8" Pipe
4 Taps



8 Taps .
946 Feet 8" Pipe.

VI. BID SHEET

BID SHEET

<u>Item</u>	<u>Quantity</u>	<u>Description</u>	<u>Unit Price</u>	<u>Total Price</u>
1.	6,400 lf.	Install cured-in-place pipe liner in an 8-inch sewer pipe	\$ _____ lf	\$ _____
2.	1,200 lf.	Install cured-in-place pipe liner in an 8-inch sewer pipe	\$ _____ lf	\$ _____
3.	25 ea	Reconnection (reinstatement) of lateral service connections	\$ _____ ea	\$ _____
6.	As requested	Video Inspection only (At City's request)	\$ _____ hr	\$ _____
Total All Items				\$ _____

All prices must be quoted F.O.B. Germantown, TN.

Describe any Exceptions to these Specifications: _____

Describe General Warranty: _____

Company Name

Signature

Service Date after Receipt of Order

Print Name & Title

Bid Price Effective Until (Date)

Telephone & Facsimile Number

Street Address

City/State/Zip

Contractor's License No. & Classification

Expiration Date

VII. DRUG AND ALCOHOL TESTING POLICY AND AFFIDAVIT

CITY OF GERMANTOWN DRUG AND ALCOHOL TESTING POLICY

All City of Germantown employees are subject to reasonable suspicion drug and alcohol testing. Employees in safety-sensitive positions, including, without limitation, police, fire and those who hold a commercial driver's license, are subject to pre-employment, reasonable suspicion, post-accident and random drug and alcohol testing. All BIDDERS are required to submit an affidavit, in the form attached hereto, that attests that such bidder operates a drug-free workplace program or other drug or alcohol testing program with requirements at least as stringent as that of the program operated by the City of Germantown. BIDDERS are hereby notified pursuant to Public Chapter 693 of the Public Acts of 2002 (codified as T.C.A. Section 50-9-114) that employers shall have seven (7) calendar days from the date that the successful BIDDER and the City of Germantown enter into the Contract & Agreement to file suit in the Shelby County Chancery Court to contest the Contract & Agreement issued to the successful BIDDER on the grounds that it violates said Public Chapter due to the fact that the successful BIDDER did not comply with said Public Chapter. Employers that do not contest the Contract & Agreement within said seven (7) calendar days by filing suit in Shelby County Chancery Court shall waive their rights to challenge the Contract & Agreement for violation of the provisions of Public Chapter 693.

**DRUG AND ALCOHOL TESTING ACKNOWLEDGMENT STATEMENT
AND AFFIDAVIT**

Comes _____, for and on behalf of
(*Printed name of Principal Officer of Company*)

_____, (the "Company") and makes oath that: (i) the Company has received a copy of the relevant portions of the City of Germantown Drug and Alcohol Testing Policy; (ii) the Company understands that it must have a drug and alcohol testing policy at least as stringent as that of the City of Germantown; and (iii) the Company has in effect a drug and alcohol testing policy at least as stringent as that of the City of Germantown.

Attached hereto is a summary of the relevant portions of the Company's drug and alcohol testing program or a complete copy thereof.

Signature

Title: _____

Sworn to and subscribed before me, a Notary Public, this _____ day of _____, 2013.

Notary Public

My Commission Expires:

VIII. VOLUNTARY TITLE VI AND TITLE IX FORM INFORMATION

TITLE VI INFORMATION

1. The City of Germantown agrees to comply with the Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d, et seq.), and the Department of Transportation Implementing Regulations (49 CFR Part 21) relative to the Contract which is the subject hereof.
2. The Contractor is requested, but is not obligated, to include the attached disclosure sheet, Voluntary Title VI and Title IX Form, with the Contractor's sealed bid.

VOLUNTARY TITLE VI AND TITLE IX FORM

Attach form to sealed bid

For Title VI and Title IX compliance, the Contractor's voluntary disclosure of the following information is requested.

1. Number of Contractor's Employees Who Are:

_____ Male _____ Female

2. Number of Contractor's Employees Who Are:

_____ Caucasian _____ African-American

_____ Other (please specify) _____

IX. PAYMENT & PERFORMANCE BONDS

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS, that

(Name of Contractor)

(Address of Contractor) a

(State of formation of CONTRACTOR)

(Corporation, Partnership, Limited Liability

Company, Individual or Joint Venture—indicate which), hereinafter called CONTRACTOR,

and _____
(Name of Surety)

(Address of Surety)

hereinafter called SURETY, are held and firmly bound unto the City of Germantown, Tennessee,

1930 South Germantown Road, Germantown, Tennessee, hereinafter called OWNER, in the

penal sum of

_____ Dollars

(\$_____), in lawful money of the United States, for the payment of which sum

well and truly to be made, we bind ourselves, and our successors, and assigns, jointly and

severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the CONTRACTOR has entered into a certain Contract and Agreement (“Contract”) with the OWNER which is made a part hereof by reference for the project:

Rehabilitation of Pipelines – Cured in Place

NOW, THEREFORE, if the CONTRACTOR shall promptly make payment to all persons, firms, and SUBCONTRACTORS furnishing materials for or performing labor in the

prosecution of the work provided for in such Contract, and any extension or modification thereof, including all amounts for materials, lubricants, oil, gasoline, parts and repairs on machinery, equipment, and tools consumed or used in connection with such work, and all insurance premiums on said work, and for all labor performed in such work, whether by SUBCONTRACTORS or otherwise, then this obligation shall be void; otherwise, same is to remain in full force and effect.

PROVIDED, FURTHER, that said SURETY, for value received, hereby stipulates and agrees that no change, extension of time, modification, alteration, or addition to the terms of the Contract, to the work to be performed thereunder or to the SPECIFICATIONS accompanying the same shall in any way release its obligation under this BOND. Said SURETY hereby waives notice of any such change, extension of time, modification, alteration, or addition to the terms of the work or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim is entitled to be satisfied by the CONTRACTOR and its SURETY.

PROVIDED, FURTHER, that the CONTRACTOR and SURETY agree that any claim under this BOND may only be litigated in a court of competent jurisdiction in Shelby County, Tennessee.

IN WITNESS WHEREOF, this instrument is duly executed, this the _____ day of _____, 2013.

(*CONTRACTOR*)

By: _____

Title: _____

Address: _____

(*SURETY*)

By: _____

(*Attorney-in-Fact*)

Title: _____

Address: _____

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that

_____*(Name of Contractor)*

_____*(Address of Contractor)* a

_____*(State of formation of CONTRACTOR)*

_____*(Corporation, Partnership, Limited Liability*

Company, Individual or Joint Venture—indicate which), hereinafter called CONTRACTOR,

and _____*(Name of Surety)*

_____*(Address of Surety)*

hereinafter called SURETY, are held and firmly bound unto

the City of Germantown, Tennessee, 1930 South Germantown Road, Germantown, Tennessee,

hereinafter called OWNER, in the penal sum

of _____Dollars

(\$_____), in lawful money of the United States, for the payment of which sum

well and truly to be made, we bind ourselves, and our successors, and assigns, jointly and

severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that, whereas, the CONTRACTOR has entered into a certain Contract and Agreement (“Contract”) with the OWNER, which is made a part hereof by reference, for the project:

Rehabilitation of Pipelines – Cured in Place

_____, and if

the CONTRACTOR shall satisfy all claims and demands incurred under such Contract, and shall

fully indemnify and save harmless the OWNER from all costs and damages which it may suffer

by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void; otherwise, same is to remain in full force and effect.

PROVIDED, FURTHER, that the said SURETY, for value received hereby, stipulates and agrees that no change, extension of time, modification, alteration, or addition to the terms of the Contract or to the work to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any way release its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, modification, alteration, or addition to the terms of the Contract, to the work, or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder whose claim may be unsatisfied and which is entitled to be satisfied by the CONTRACTOR and SURETY.

PROVIDED, FURTHER, that the CONTRACTOR and SURETY agree that any claim under this BOND may only be litigated in a court of competent jurisdiction in Shelby County, Tennessee.

IN WITNESS WHEREOF, this instrument is duly executed this the _____ day of _____, 2013.

(CONTRACTOR)

By: _____

Title: _____

Address: _____

(SURETY)

By: _____

(Attorney-in-Fact)

Title: _____

Address: _____

X. GERMANTOWN INSURANCE REQUIREMENT

GERMANTOWN INSURANCE REQUIREMENT CITY PROJECT CONTRACT

The CONTRACTOR shall purchase and maintain such comprehensive general liability and other insurance as will provide protection from claims set forth below which may arise out of or result from the CONTRACTOR'S performance of the work and the CONTRACTOR'S other obligations under the Contract Documents, whether such performance is by the CONTRACTOR, by any Subcontractor, by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

1. Claims under workers' or workmen's compensation, disability benefits and other similar employee benefit acts;
2. Claims for damages because of bodily injury, occupational sickness or disease, or death of the CONTRACTOR'S employees;
3. Claims for damages because of bodily injury, sickness or disease, or death of any person other than the CONTRACTOR'S employees;
4. Claims for damages which may be insured by personal injury liability coverage which are sustained (i) by any person as a result of an offense directly or indirectly related to the employment of such person by the CONTRACTOR, or (ii) by any other person for any other reason;
5. Claims for damages, other than to the work itself, because of injury to or destruction of tangible property, including loss of use resulting there from;
6. Claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle; and
7. Claims by third parties for bodily injury and property damage arising or resulting from the CONTRACTOR's failure to comply with any obligation undertaken by him pursuant to the Contract Documents.

The automobile general liability insurance required by this Contract shall include the specific coverage's and be written for not less than \$500,000 bodily injury and \$100,000 property damage.

The comprehensive general liability insurance required by this Contract shall include the specific coverage's and shall be written for not less than \$1 million combined per occurrence limit or \$3 million aggregate limit with the entire aggregate limits dedicated to this particular job.

The CONTRACTOR shall have and maintain during the life of the Contract and Agreement such Property Insurance upon his entire work at the site to the full insurable value thereof. This insurance shall protect the City of Germantown, as its interest may appear in the work, and shall insure against the perils of fire and extended coverage and shall include "all risk" insurance for

the physical loss or damage including, without duplication of coverage, theft, vandalism and malicious mischief.

All such insurance shall be set out on the Certificate of Insurance (form included for both occurrence and aggregate policy) executed by an insurance company or insurance companies authorized to do business in the State of Tennessee. The Certificate of Insurance shall contain the following provision:

“Should any of the described policies on the attached Certificate of Insurance be cancelled, non-renewed or reduced in coverage – the issuing insurance company will mail 30 days prior written notice to: **The City of Germantown, Risk Management Department, P.O. Box 38809 Germantown, TN 38138-0809**, by registered mail, return receipt request.”

All such insurance shall remain in effect until final acceptance and at all times thereafter when the CONTRACTOR may be correcting, removing or replacing defective work in accordance with the Contract and Agreement.

The comprehensive general liability insurance required by this section will include contractual liability insurance applicable to the CONTRACTOR’S obligations under the Contract and Agreement.

CERTIFICATE OF INSURANCE

PRODUCER Agency Address City State Zip	DATE 8/30/2004 THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.
INSURED Insured Address City State Zip	COMPANIES AFFORDING COVERAGE COMPANY LETTER A Company COMPANY LETTER B COMPANY LETTER C

COVERAGES

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED, NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN. THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CO	LT	TYPE OF INSURANCE	POLICY NUMBER	POLICY PERIOD	LIMITS	
A		GENERAL LIABILITY				
	<input checked="" type="checkbox"/>	COMMERCIAL GENERAL LIABILITY	Policy #	Date Date	GENERAL AGGREGATE	\$ 1,000,000
	<input type="checkbox"/>	CLAIMS MADE			PRODUCTS/COMPLETED OPER. AGGR.	\$ 1,000,000
	<input type="checkbox"/>	PERSONAL INJURY LIABILITY			PERSONAL & ADVERTISING INJURY	\$ 1,000,000
	<input type="checkbox"/>				EACH OCCURRENCE	\$ 1,000,000
	<input type="checkbox"/>				DAMAGE TO RENTED PREMISES	\$ 50,000
	<input type="checkbox"/>			MEDICAL EXPENSE (ANY ONE PERSON)	\$ 5,000	
					PER OCCURRENCE	
A		AUTOMOBILE LIABILITY			TORT	
	<input checked="" type="checkbox"/>	OWNED AUTOS	Policy #	Date Date	COMBINED SINGLE LIMIT	\$ 1,000,000
	<input checked="" type="checkbox"/>	HIRED AUTOS				
	<input checked="" type="checkbox"/>	NON-OWNED AUTOS				
	<input type="checkbox"/>	PHYSICAL DAMAGE				
A		WORKERS COMPENSATION AND EMPLOYERS LIABILITY			WC STATUTORY LIMITS	
			Policy #	Date Date	EL-EACH ACCIDENT	\$ 100,000
					EL-DISEASE-POLICY LIMIT	\$ 500,000
					EL-DISEASE EACH EMPLOYEE	\$ 100,000
A		Umbrella			LIABILITY LIMIT EACH OCCURRENCE	\$ 2,000,000
			Policy #	Date Date	LIABILITY AGGREGATE LIMIT	\$ 2,000,000
	<input type="checkbox"/>	SPECIAL			REATINED LIMIT	\$ 10,000
	<input type="checkbox"/>	EARTHQUAKE				
	<input type="checkbox"/>	FLOOD				
A		BUILDERS RISK			LIMIT PER LOCATION	
	<input type="checkbox"/>	PER PROJECT				
	<input type="checkbox"/>					
	<input type="checkbox"/>					

OTHER

LOCATION OF PREMISES/DESCRIPTION OF PROPERTY/DESCRIPTION OF OPERATIONS/DESCRIPTION OF VEHICLES/SPECIAL ITEMS
 City of Germantown Named as Additional Insured per Endorsement 2010 (11/85)

CERTIFICATE HOLDER City of Germantown C/O Risk Manager 1930 Germantown Road S Germantown, Tn. 38138	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, AUTHORIZED REPRESENTATIVE Producer
--	--

CITY OF GERMANTOWN
Certificate of Insurance Attachment

Named Insured: _____

Project: Rehabilitation of Pipelines – Cured in Place

This is to certify that insurance policies listed on the attached certificate of insurance contain the following:

1. General Liability Insurance Includes:
 - Premises/Operations
 - Products/Completed Operations
 - Broad Form Property Damage
 - Blanket Contractual Coverage
 - X (Explosion), C (Collapse) and U (Underground) Coverage
 - Independent Contractors
2. The City of Germantown is named as an Additional Insured on the General Liability, using a CG 2010 (11/85) endorsement, for the referenced project and the City of Germantown is named additional insured on the Business Auto Coverage.
3. Insured agrees to “Waive its Right of Subrogation” against the City of Germantown relative to Workers Compensation, General Liability, and Auto.
4. Cancellation Clause is amended to read: Should any of the described policies on the attached Certificate of Insurance be cancelled, non-renewed or reduced in coverage – the issuing insurance company will mail 30 days prior written notice to: **The City of Germantown, Risk Management Department, P.O. Box 38809 Germantown, TN 38138-0809**, by registered mail, return receipt request.

Insurance Agency or Company: _____

Authorized Agency Representative: _____
(Signature)

Date Issued: _____

XI. CONTRACT FOR SERVICES AND/OR PRODUCTS

CONTRACT FOR SERVICES AND/OR PRODUCTS

THIS CONTRACT FOR SERVICES AND/OR PRODUCTS (herein “**Contract**”) is made and entered into this _____ day of January, 2013 by and between the CITY OF GERMANTOWN, TENNESSEE, a Tennessee municipal corporation, (herein the “**CITY**”) and _____ [insert name of **CONTRACTOR**], a _____ [State where **CONTRACTOR** established, but only if an entity, not applicable to sole proprietorships] _____ [type of entity – e.g., corporation, LLC, partnership, sole proprietorship] (herein the “**CONTRACTOR**”).

W I T N E S S E T H:

WHEREAS, the CITY desires to contract with a provider of with a provider of cured-in-place sanitary sewer lining services (herein the “**Contract Items**”), and

WHEREAS, the **CONTRACTOR** has the requisite experience, abilities and resources to perform and/or furnish the foregoing, and

WHEREAS, the **CONTRACTOR** desires to enter into this Contract as an independent contractor and is ready, willing and able to provide the services and/or furnish the products in accordance with the terms of and subject to the conditions in this Contract.

NOW, THEREFORE, for good and valuable consideration, received or to be received, the sufficiency of which the parties acknowledge, the parties agree as follows:

1.0 SCOPE OF CONTRACT

The **CONTRACTOR** is to furnish the services and/or products as indicated in the CITY requisition. The CITY requisition is attached hereto as **Exhibit “A”** and incorporated by reference herein and made a part hereof. Unless otherwise specified herein, the **CONTRACTOR** is to furnish all materials, tools, equipment, manpower, and consumables necessary to complete the Contract Items.

2.00 TERM OF CONTRACT

The **CONTRACTOR** shall fully perform the Contract Items not later than Ninety (90) days from issuance by the CITY of an authorized Purchase Order or at a later date as mutually agreed by the CITY and the **CONTRACTOR**.

3.00 COMPENSATION

3.01. Amount of Compensation. The **CONTRACTOR** agrees to provide the services, equipment and products as specified in its bid to the CITY at the cost specified in said bid and amendments, if any, the bid and any amendments thereto being attached hereto as **Exhibit “B”** and incorporated by reference herein and made a part hereof. The amount as specified in **Exhibit “B”** may be increased or decreased by the CITY under Section 4.00 of this Contract (“Additional

Services”), through the issuance of an Addendum. Any prices specified in this Contract or an Addendum thereto will remain in effect for the term of this Contract or any extensions thereof.

3.02. Payment of Compensation. All invoices received by the CITY are payable within thirty (30) days from receipt, provided they have first been approved by the CITY department that is the beneficiary of the Contract Items, and such department has accepted the Contract Items. The CITY reserves the right to partially pay any invoice submitted by the CONTRACTOR when requested to do so by the CITY department that is the beneficiary of the Contract Items. All invoices shall be directed to the Accounts Payable Department, City of Germantown, 1930 South Germantown Road, Germantown, Tennessee 38138. In the event any Contract Items are deemed unacceptable, the CITY’S representative shall notify the CONTRACTOR of the deficiencies in writing and the CITY may withhold payment until the deficiencies are corrected to the satisfaction of the CITY, such determination to be made in the sole and absolute discretion of the CITY. All invoices must clearly indicate the Invitation to Bid number.

4.00 ADDITIONAL SERVICES

In the event the CITY requests that the CONTRACTOR perform additional services and/or furnish additional products not covered by this Contract, the CONTRACTOR shall perform such additional services after the CITY and the CONTRACTOR enter into an equitable agreement regarding the additional services and/or products.

5.00 NOTICE TO PROCEED

The CONTRACTOR shall commence to perform and/or furnish the Contract Items called for under this Contract upon the written Notice to Proceed issued by the CITY.

6.00 CONFLICT OF INTEREST

The CONTRACTOR declares that neither the Mayor, nor any Aldermen, nor any other CITY official or employee holds a direct or indirect interest in this Contract. The CONTRACTOR pledges that it will notify the CITY in writing should any CITY official become either directly or indirectly interested in this Contract. The CONTRACTOR declares that as of the date of this declaration that it has not given or donated or promised to give or donate, either directly or indirectly, to any official or employee of the CITY, or to pay anyone else for the benefit of any official or employee of the CITY any sum of money or other thing of value for aid or assistance in obtaining this Contract. The CONTRACTOR further pledges that neither it nor any of its owners, officers or employees will give or donate or promise to give or donate, directly or indirectly, to any official or employee of the CITY or anyone else for the benefit thereof any sum of money or other thing of value for aid or assistance in obtaining any change order to this Contract.

7.00 COMPLIANCE WITH LAWS

The CONTRACTOR agrees to observe and to comply at all times with all applicable Federal, State, and local laws, ordinances, and regulations in any manner affecting the provision of the Contract Items and to comply with all instructions and orders issued by the CITY regarding the Contract Items.

8.00 TERMINATION

Upon thirty (30) days written notice, with or without cause, the CITY may terminate this Contract. Following such termination, the CITY and the CONTRACTOR shall agree upon an amount of payment for all Contract Items properly performed or furnished prior to the effective date of termination.

9.00 WARRANTY

The CONTRACTOR warrants that the Contract Items, including any equipment and products provided shall: in the case of services (i) conform to all applicable standards of care and practice in effect at the time the service is performed; (ii) be of the highest quality; and (iii) be free from all faults, defects or errors; and in the case of products meet the specifications in the Invitation to Bid. The CONTRACTOR warrants that all equipment and products provided shall be furnished to the CITY in good and working condition. If the CONTRACTOR is notified in writing by the CITY of any faulty Contract Items furnished by the CONTRACTOR, the CONTRACTOR shall, at the CITY'S option, either: (i) perform again the relevant Contract Items to correct such fault, defect or error, at no additional cost to the CITY; or (ii) refund to the CITY the charge paid by the CITY which is attributable to such portions of the faulty, defective or erroneous Contract Items, including any costs for re-provision of the relevant Contract Items by other contractors. The CONTRACTOR warrants that all products provided by the CONTRACTOR shall be merchantable, be fit for the purpose intended and shall meet the specifications of the Invitation to Bid. The CONTRACTOR shall be liable for secondary, incidental or consequential damages of any nature resulting from any work performed under this Contract.

10.00 FORCE MAJEURE

The obligations of CONTRACTOR hereunder are subject to and shall be excused in the event of riots, wars, and Acts of God.

11.00 INSURANCE

11.01. Comprehensive General Liability Insurance. The CONTRACTOR, at its own expense, shall keep in force and at all times maintain during the term of this Contract Comprehensive General Liability Insurance issued by a responsible insurance company and in a form acceptable to the CITY, coverage for CONTRACTOR on an occurrence basis against claims for bodily injury, death or property damage with combined single limits of not less than One Million Dollars (\$1,000,000) for Bodily Injury and Property Damage.

11.02. Automobile Liability Insurance. The CONTRACTOR, at its own expense, shall keep in force and at all times maintain during the term of this Contract Automobile Liability coverage in the minimum amount of Five-Hundred Thousand Dollars (\$500,000) combined single limits for Bodily Injury and Property Damage.

11.03. Workers' Compensation Coverage. The CONTRACTOR, at its own expense, shall keep in force and at all times maintain during the term of this Contract full and complete Workers' Compensation Coverage as required by State of Tennessee law.

11.04. Certificates of Insurance. The CONTRACTOR shall provide the CITY with Certificates of Insurance on all the policies of insurance and renewals thereof in forms acceptable to the CITY. Said Comprehensive General Liability policy shall provide that the CITY be an additional insured. The CITY shall be notified in writing of any reduction, cancellation or substantial change of said policy or policies at least thirty (30) days prior to the effective date of said action. All insurance policies shall be issued by responsible companies who are acceptable to the CITY and licensed and authorized to do business under the laws of the State of Tennessee.

12.00 CLAIMS, LIABILITY AND INDEMNITY

The CONTRACTOR shall assume all risk in connection with the performance of this Contract, and shall be liable for any damages to persons or property resulting from the negligent or willful acts, errors, or omissions of the CONTRACTOR, its agents, servants, and/or employees in connection with the prosecution and completion of the Contract Items covered by this Contract. The CONTRACTOR agrees that it will indemnify and hold the CITY and its employees harmless from all claims of any type and for any expenses and costs, including attorney's fees and court costs which may be incurred by the CITY, arising from the negligent or willful acts, errors, or omissions of the CONTRACTOR, its agents, servants and/or employees in the performance of this Contract, and the CONTRACTOR will carry sufficient general liability insurance to provide the above indemnification. The indemnities set forth herein shall survive the expiration or termination of this Contract.

13.00 ATTORNEY'S FEES

If any legal action or other proceeding is brought for the enforcement of this Contract or because of any alleged dispute, breach, default, or misrepresentation in connection with any provisions of the Contract and the CITY is successful therein, the CITY shall be entitled to recover from the CONTRACTOR reasonable attorney's fees, court costs and all expenses even if not taxable or assessable as court costs (including, without limitation, all such fees, costs and expenses incident to appeal) incurred in that action or proceeding in addition to any other relief to which the CITY may be entitled.

14.00 EQUAL EMPLOYMENT OPPORTUNITY

14.01. Non-discrimination. In carrying out the Contract Items under this Contract, the CONTRACTOR shall not discriminate against any employee or applicant for employment because of race, creed, color, national origin or sex. The CONTRACTOR shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, creed, color, national origin or sex. Such action shall include, but not be limited to, the following: employing; upgrading; demoting; transferring; recruiting or paying recruitment compensation; and selecting for training, including apprenticeships.

14.02. Posting and Advertising. The CONTRACTOR agrees to post in conspicuous spaces available to employees and applicants for employment a notice, setting forth the provisions of the non-discrimination clause contained in Paragraph 14.01 hereinabove. The CONTRACTOR shall, in all solicitations or advertisements for employees placed by, or on behalf of, the CONTRACTOR, state that all qualified applicants shall receive consideration for

employment without regard to race, creed, color, national origin or sex. The CONTRACTOR shall incorporate the foregoing requirements of this Paragraph 14.02 in all subcontracts, if any, for services or products covered by this Contract.

15.00 TRANSFER, ASSIGNMENT OR SUBLETTING

This Contract shall not be transferred or assigned or sublet without prior written consent of the CITY.

16.00 SAFETY MEASURES

The CONTRACTOR shall take all necessary precautions for the safety of the CITY'S and CONTRACTOR'S employees and the general public and shall erect and properly maintain at all times all necessary vehicular and facility safeguards for the protection of workmen and the public. If necessary, the CONTRACTOR shall post signs warning against hazards in and around the site where the CONTRACTOR is furnishing Contract Items.

17.00 FAMILIARITY WITH THE CONTRACT ITEMS

The CONTRACTOR, by executing this Contract, acknowledges full understanding of the extent and character of the Contract Items required and the conditions surrounding the provision thereof. The CITY will not be responsible for any alleged misunderstanding of the Contract Items to be furnished or completed, or any misunderstanding of conditions surrounding the performance thereof. It is understood that the execution of this Contract by the CONTRACTOR serves as the CONTRACTOR'S stated commitment to fulfill all the conditions referred to in this Contract.

18.00 ENTIRE AGREEMENT

This Contract and all exhibits hereto constitute the entire agreement and understanding between the parties relating to the subject matter herein and shall not be modified, altered, changed or amended unless in writing and signed on behalf of the parties. Each and every modification and amendment of this Contract must be in writing and signed by all of the parties hereto. Each and every waiver of any covenant, representation, warranty, or other provision of this Contract must be in writing and signed by each party whose interest is adversely affected by such waiver. No waiver granted in any one instance shall be construed as a continuing waiver applicable in any other instance.

19.00 PERMITS, LICENSES AND CERTIFICATES

The CONTRACTOR is to procure all permits, licenses, and certificates, or any such approvals of plans or specifications as may be required by federal, state and local laws, ordinances, rules, and regulations, for the proper execution and completion of the Contract Items under this Contract.

20.00 FIRE, THEFT, LOSS

The CONTRACTOR is responsible for all damage or loss by fire, theft or otherwise to materials, tools, equipment, and consumables left on CITY property by the CONTRACTOR.

21.00 CONTRACTING AUTHORITY

The persons executing this Contract on behalf of the CITY and the CONTRACTOR hereby personally represent and warrant to all other parties that they have been duly authorized to execute and deliver this Contract.

22.00 GOVERNING LAW

This Contract is being executed and delivered and is intended to be performed in the State of Tennessee, and the laws (without regard to principles or conflicts of law) of such state, and of the United States of America shall govern the rights and duties of the parties hereto in the validity, construction, enforcement and interpretation hereof. Any litigation brought with respect to this Contract shall be brought in a court of competent jurisdiction in Shelby County, Tennessee and the CONTRACTOR hereby consents to the jurisdiction of such courts.

23.00 OPPORTUNITY FOR REVIEW

Each party has received and had the opportunity to review this Contract, and each party has had the opportunity, whether exercised or not, to have each respective party's attorneys review this Contract; and, accordingly, the normal rule of construction to the effect that any ambiguities are resolved against the drafting party shall not be employed in the interpretation of this Contract.

24.00 SECTION HEADINGS

The section headings contained in this Contract are for convenience of reference purposes only and are not intended to qualify the meaning of any section and shall not affect the interpretation of this Contract.

25.00 NOTICES

All notices, demands, and requests required or permitted by this Contract shall be in writing and shall be sent by facsimile transmission, air or other courier, or hand delivery as follows:

- (i) To: City of Germantown
1930 South Germantown Road
Germantown, TN 38138
Facsimile: (901) 757-7258
- (ii) To: **[Insert Name of CONTRACTOR]**

Facsimile: () _____

Any notice, demand, or request sent by facsimile transmission shall be deemed given for all purposes under this Contract when properly transmitted by telecommunication device. Any notice, demand, or request which is hand delivered or sent by air or other courier shall be deemed given for all purposes under this Contract when received.

Any party to this Contract may change such party's address and/or telecopier number for the purpose of notices, demands and requests required or permitted under this Contract by providing written notice of such change of address to all of the parties, which change of address shall only be effective when notice of the change is actually received by the party who thereafter sends any notice, demand or request.

26.00 SEVERABILITY

If any provision of this Contract is held to be unlawful, invalid or unenforceable under present or future laws effective during the terms hereof, such provision shall be fully severable and this Contract shall be construed and enforced as if such unlawful, invalid, or unenforceable provision were not contained herein by its severance herefrom. In addition, in lieu of such unlawful, invalid or unenforceable provision, there shall be added automatically as a part hereof a provision as similar in terms to such unlawful, invalid, or unenforceable provisions as may be possible and may be lawful, valid or enforceable. Furthermore, if any provision of this Contract is capable of two constructions, one of which would render the provision void and the other which would render the provision valid, then the provision shall have the meaning which renders it valid.

27.00 NO CONSENT TO BREACH

No consent or waiver, express or implied, by any party to this Contract to or of any breach or default by the other party to this Contract in the performance by such other party of its obligations hereunder shall be deemed or construed to be a consent or waiver to or of any other breach or default of the same or any other obligations hereunder. Failure on the part of any party to this Contract to complain of any act or failure to act of any other party to this Contract, or to declare such party in default, irrespective of how long such failure continues, shall not constitute a waiver by the non-defaulting party of its rights hereunder.

28.00 OTHER INSTRUMENTS

The parties shall execute and deliver all other appropriate supplemental agreements and other instruments and take any other action necessary to make this Contract fully and legally effective, binding and enforceable as between the parties and as against third parties.

[Signatures to follow on next page]

WITNESS THE DUE EXECUTION HEREOF.

**CITY OF GERMANTOWN,
TENNESSEE**

By: _____
Sharon Goldsworthy, Mayor

ATTEST:

By: _____
City Clerk/Recorder

APPROVED AS TO FORM AND
CONTENT:

City Attorney

[INSERT NAME OF CONTRACTOR]

By: _____

Its: _____

CONTRACTOR's Mailing Address:

CONTRACTOR's Telephone Number:

(_____)_____

CONTRACTOR's Facsimile Number:

(_____)_____

EXHIBIT “A”

Invitation to Bid “Rehabilitation of Pipelines Cured-In-Place Pipe”

EXHIBIT “B”
CONTRACTOR’S Bid